Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. Canceled.

2. (Currently amended) ~~The~~ An NMR-based method ~~according to claim 1~~ comprising the steps of:

a) hyperpolarising at least one of ~~said~~ a ligand and ~~or said~~ a target, wherein said at least one of a ligand and a target is isotopically enriched with at least one of ^{12}C and ^{15}N NMR active nuclei,

b) forming a mixture by contacting either the at least one hyperpolarised ligand with one of a target and both a target and at least one further ligand or the hyperpolarised target with at least one ligand,

c) generating a NMR spectrum of the mixture, and

d) comparing said NMR spectrum with a reference spectrum of the at least one hyperpolarised ligand or the hyperpolarised target.

3. (Currently amended) The method according to claim ~~1~~ 2, wherein the at least one ~~of the ligands~~ ligand is selected from the group consisting of proteins, glycoproteins, lipoproteins, polypeptides, glyco-polypeptides, lipopolypeptides, peptides, carbohydrates, nucleic acids or a part, a fragment or a complex thereof and small organic molecules.

4. (Currently amended) The method according to claim ~~1~~ 2, wherein the at least one ~~of the ligands~~ ligand is a small organic molecule of less than 2000 Da.

5. (Currently amended) The method according to claim ~~1~~ 2, wherein more than one hyperpolarised ligand is used.

6. (Currently amended) The method according to claim ~~1~~ 2, wherein the target is selected from the group consisting of proteins, glycoproteins, lipoproteins, nucleic acids, polypeptides, glycopolypeptides, lipopolypeptides, peptides or a part, a fragment or a complex thereof.

7. Canceled.

8. Canceled.

9. Canceled.

10. (Currently amended) The method according to claim ~~9~~ 2, wherein the enrichment is a ^{13}C-enrichment.

11. (Currently amended) The method according to claim ~~1~~ 2, wherein the NMR spectrum generated is a one-dimensional NMR spectrum

12. (Currently amended) The method according to claim ~~1~~ 2, wherein the NMR spectrum generated is generated using low flip angles.

13. (Currently amended) The method according to claim ~~1~~ 2, wherein the comparison with the reference spectrum shows a chemical shift difference, a relaxation time difference or a NOE effect difference.

14. Canceled.

15. Canceled.